

# The identification, taxonomy and distribution of the Mountain Nightjar *Caprimulgus poliocephalus* / Fiery-necked Nightjar *C. pectoralis* complex

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**Résumé:** Deux groupes d'engoulevents afrotropicaux sont tellement étroitement liés qu'ensemble ils forment une superespèce. Ils partagent des caractéristiques extrêmement similaires du point de vue du plumage et des vocalisations et habitent des bois, des campagnes boisées et les lisières des forêts. Un groupe comprend l'engoulevent d'Abyssinie, *Caprimulgus poliocephalus*, des formes complexes de montagne qui vivent normalement au dessus de 1500 m. L'autre groupe consiste en l'Engoulevent musicien, *Caprimulgus pectoralis*, des formes complexes des plaines qui vivent normalement en dessous de 1500 m. L'opinion taxonomique est divisée quant au nombre d'espèces appartenant à chaque groupe, certains penchant pour une espèce de montagne et une de plaine, d'autres pour deux espèces de montagne et deux de plaines. La présente communication examine la morphologie, les vocalisations et la distribution de toutes les formes existant au sein des deux groupes et soutient l'avis que quatre espèces peuvent être reconnues. Un nouvel examen des deux races du sud de l'Engoulevent d'Abyssinie *Caprimulgus poliocephalus* est également effectué.

Nightjars are generally nocturnal birds that spend the day roosting on or close to the ground, often in rather open situations. It is whilst roosting that they are most vulnerable and they rely almost exclusively on camouflage to remain undetected. Many species prefer to roost on or amongst leaf-litter and have evolved plumages which render individuals cryptic by day. This, together with their nocturnal behaviour, makes identifying many nightjar species in the field rather daunting. Geographical and individual variation, especially in colour<sup>1</sup>, can further complicate the correct identification of similarly sized, variegated nightjars. As a result a set of consistent characters needs to be examined to ascertain a nightjars identification. Characteristics which are, presumably, of importance to other nightjars are the vocalisations<sup>2</sup>, especially the territorial song of the males, and the white markings on the wings and tail<sup>1,2</sup>, which are used in a variety of displays. These may be by one sex to another during courtship and breeding, by one male to another during territorial establishment and defence, or by an adult to potential danger during the defence of its eggs or young. These markings are often only visible when the wings and tail are spread, usually whilst birds are in flight. Most nightjars also have white patches on the throat, but this characteristic can be quite variable and is not generally recognised as being of specific or subspecific importance.

Two groups of closely related afrotropical nightjars share extremely similar plumage features and

vocalisations, one group comprising the Mountain Nightjar complex, the other, their lowland counterparts, the Fiery-necked Nightjar complex. Together these groups constitute a superspecies<sup>2</sup>, although taxonomic opinion is divided as to whether two (one montane, one lowland) or four (two montane, two lowland) species are involved.

This paper briefly examines the morphology, vocalisations and distribution of all forms within the two groups and supports the view of several authorities eg Fry<sup>2</sup> that four species may be recognised. A reappraisal of the two southerly races of the Mountain Nightjar is also given.

## The Mountain Nightjar group

Mountain nightjars are small to medium sized, brown, variegated caprimulgids, usually occurring in highland forested regions above 1,500 m, although birds have been recorded as low as 1,000 m. Nine distinctly separate populations have so far been located and these are currently classified in four racial groups, Mountain Nightjar *Caprimulgus poliocephalus*, *C. (p)? guttifer* and *C. (p)? koesteri* and Rwenzori Nightjar *Caprimulgus ruwenzorii*. All four forms share approximately the same size and structure, being 22-24 cm in length and small-bodied. They differ from the lowland Fiery-necked Nightjar group by being generally browner and darker overall, with more extensive amounts of white on the two outer-tail feathers.

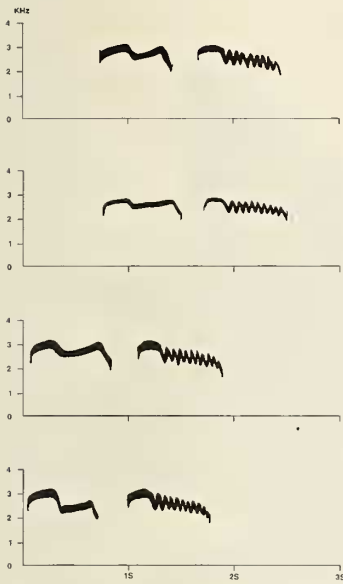


Figure 1  
Sonograms of songs of:  
(*Sonogrammes des chants de:*)  
A *C. poliocephalus* Kenya (Kenya) (R McVicker)  
B *C. poliocephalus* Kenya (Kenya) (G Low)  
C *C. poliocephalus* Kenya (Kenya) (M North)  
D *C. poliocephalus* Kenya (Kenya) (M North)

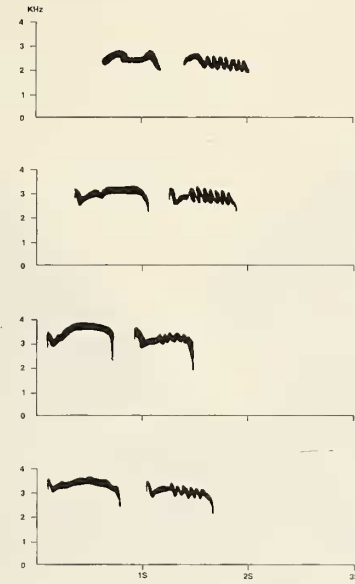


Figure 2  
Sonograms of songs of:  
(*Sonogrammes des chants de:*)  
L *C. poliocephalus* Northern Tanzania (north de la Tanzanie) (R Stjernstedt)  
F *C. (p)? guttifer* Southern Tanzania (sud de la Tanzanie) (R. Stjernstedt)  
G *C. ruwenzorii* Uganda (Ouganda) (S Keith)  
H *C. (p)? guttifer* Northern Malawi (north du Malawi) (F Dowsett-Lemaire)

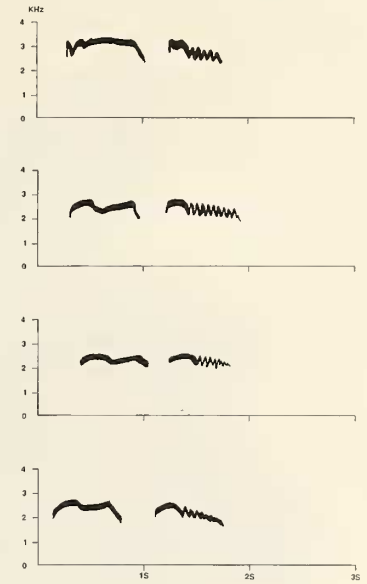


Figure 3  
Sonograms of songs of:  
(*Sonogrammes des chants de:*)  
I *C. ruwenzorii* Rwanda (Ruanda) (F Dowsett-Lemaire)  
J *C. poliocephalus* Tanzania (Tanzanie) (T Parker)  
K *C. poliocephalus* Kenya (Kenya) (M Coverdale)  
L *C. poliocephalus* Saudi Arabia (Arabie Saoudite) (H Winkler)

## Identification

### Mountain Nightjar

Upperparts brown or greyish-brown, streaked and speckled blackish-brown; wing coverts spotted buffish, greyish-white and blackish-brown. Broad buff or tawny-buff collar around hindneck. The scapulars are blackish-brown on the inner webs and buff on the outer webs, which shows as a distinct buff line on a sitting bird. The white throat patch either covers the entire lower throat or occurs as a small patch on each side. The breast is brown or greyish-brown, speckled and spotted buff, greyish-white and cinnamon. The belly and flanks are buff barred with brown. The male has a white spot almost midway along the outer wing, on the four outer primaries and the two outer-tail feathers are almost entirely white. The female has the white throat patch smaller or even absent, the white spots on the four outer primaries smaller and less white on the two outer-tail feathers, usually covering the distal half or two-thirds (40.5-101 mm).

### Rwenzori Nightjar

Similar to Mountain Nightjar but generally darker brown overall. The male often has smaller white spots on the four outer primaries and less white on the two outer-tail feathers, usually covering the distal half (46-68 mm), the amount of white reducing clinally, from the north of the range southwards. The female is similar to the male but has the white primary spots tinged buff and less white on the two outer-tail feathers (c21-33 mm).

Of the two remaining forms, *C. (p)? guttifer* closely resembles Rwenzori Nightjar but has slightly less white on the two outer-tail feathers, 38-42 mm on males, 20-23 mm on females. *C. (p)? koesteri* is identical to Rwenzori Nightjar. The amount of white on the two

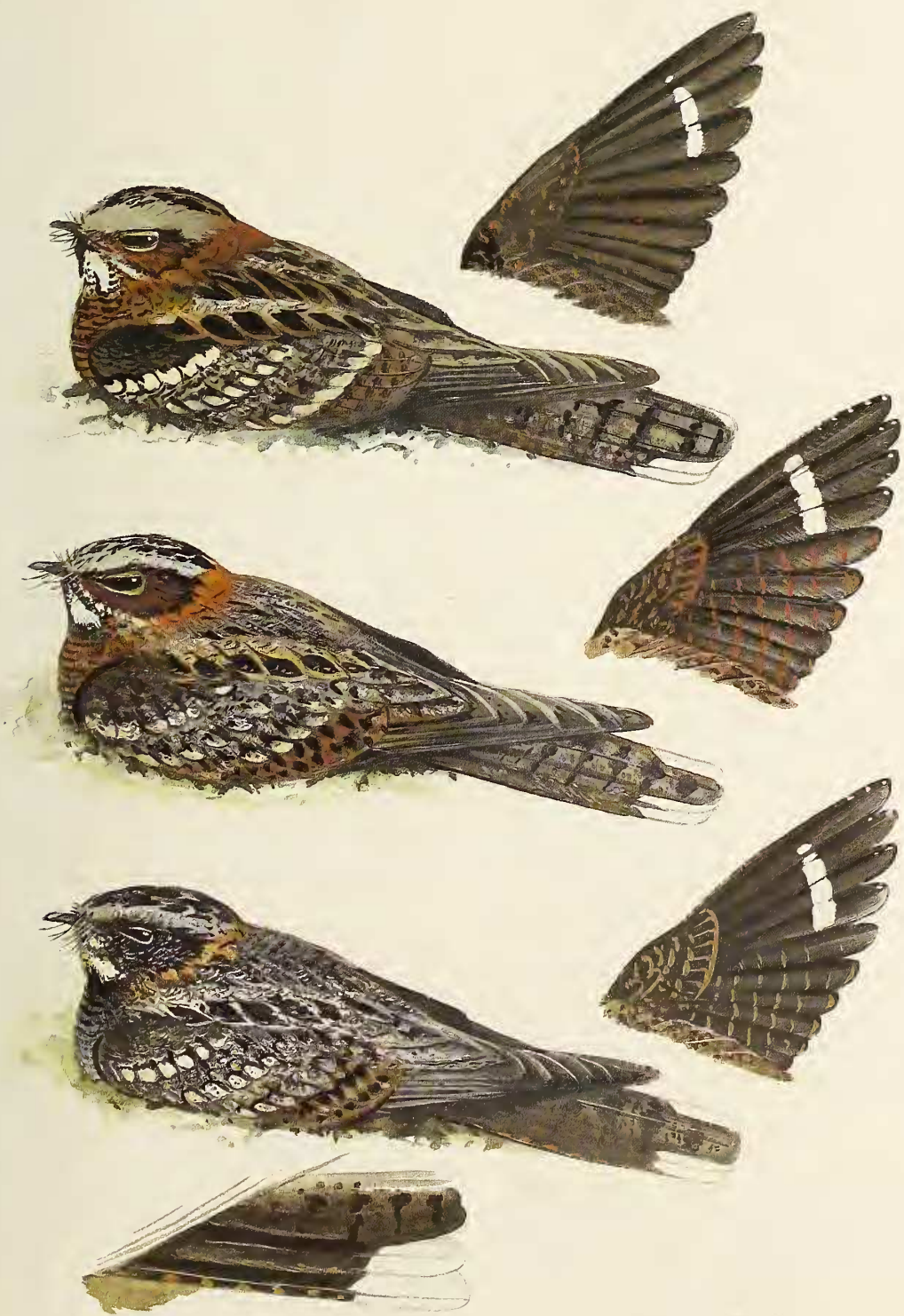
#### Plate 3 (page 88)

upper ( <i>en haut</i> )	lower ( <i>en bas</i> )
Mountain Nightjar	Rwenzori Nightjar
( <i>Engoulevant d'Abyssinie</i> )	( <i>Engoulevant de Ruwenzori</i> )
<i>Caprimulgus poliocephalus</i>	<i>C. ruwenzorii</i>

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outer-tail feathers of one male specimen is 55 mm, which falls almost midway in the range given for this character for Rwenzori Nightjar.

## Voice

### Mountain Nightjar

The song is a double-noted whistle, *peuu-eee, pe-uu-uu-uu*. Sonograms of recordings from Kenya and northern Tanzania, deposited in the National Sound Archives Wildlife Section (NSAWS) London, and the Library of Natural Sounds, New York, are reproduced in Figure 1 (A to D), Figure 2 (E) and Figure 3 (J and K). A sonogram of a recording from Saudi Arabia, made by Dr H Winkler, is reproduced in Figure 3 (L). Individual variation is immediately evident but the general structure and frequency of each song always remains the same. The first whistle has an undulating quality, the second is trilled and descends slightly in pitch. Each note registers within a band of 2.0–3.2 khz. Songs from Ethiopia remain unrecorded.

The flight (alarm?) call is a series of deep *kak-kab-kab* notes.

### Caprimulgus (p)? *guttifer*

The song of this form is a double-noted whistle, which is identical in structure and pitch to the song of Rwenzori Nightjar. Sonograms of recordings from southern Tanzania and northern Malawi, deposited in the NSAWS, are reproduced in Figure 2 (F and H).

### Caprimulgus (p)? *koesteri*

The vocalisations of this form remain unknown.

### Rwenzori Nightjar

The song of this form is also a double-noted whistle *pee-eee, pee-uuu*. A sonogram of a recording from Rwanda, deposited in the NSAWS is reproduced in Figure 2 (G). A sonogram of a recording from Uganda, taken from disc<sup>3</sup>, is reproduced in Figure 3 (I). Individual variation is evident from just these two recordings but both show a consistent difference from the songs of Mountain Nightjar. The first whistle lacks the undulating quality of that species, the second is shorter and less trilled. Each note registers at a slightly higher frequency, within a band of 2.5–3.8 khz.

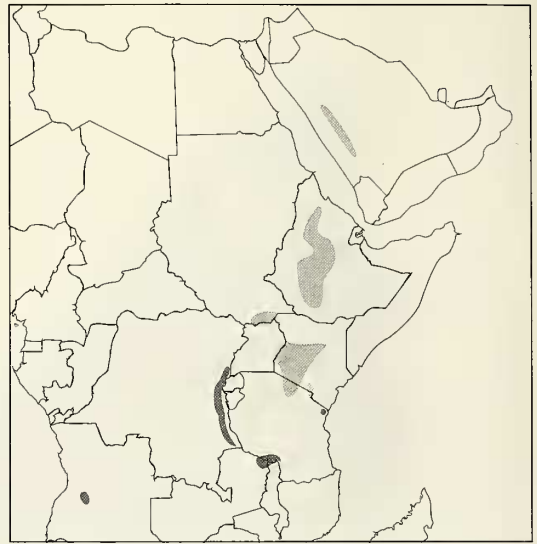


Figure 4 Distribution of Mountain Nightjar (grey), and Rwenzori Nightjar (solid)

Figure 4 Distribution de l'Engoulevent d'Abyssinie (gris), et de l'Engoulevent de Ruwenzori (noir)

The flight call is a rapid series of *ka-ka-ka-kab* notes, which are usually softer, less harsh than those of Mountain Nightjar.

## Distribution

Mountain Nightjar has the widest distribution, comprising at least five separate populations. It is found in western and central Ethiopia, southern Sudan, northern Uganda, much of southwestern Kenya and the extreme north of Tanzania. A newly discovered population has been located along the western slopes of the Asir mountains in Saudi Arabia, and is also likely to occur in Yemen<sup>4</sup>.

The species generally occurs between 1,500 and 3,350 m, but may occasionally be found as low as 1,000 m. All populations are sedentary, although in Saudi Arabia birds may move altitudinally in winter<sup>4</sup>.

The range of Rwenzori Nightjar is currently considered to be along the Rwenzori and Mitumba mountain ranges, from south-western Uganda and western Rwanda to western Burundi and eastern Zaire, although it is not known from Mount Kabobo, birds from this location being attributed to *C. (p)? guttifer*, possibly on the basis of one specimen. Louette<sup>5</sup> considered a male specimen from this location to differ from the Rwenzori Nightjar only by the amount of white on the outer-tail feathers (47.5 mm) compared to 52.5–66 mm on nine males collected further to the north. Fry et al<sup>6</sup> gives the range of this characteristic as 46–68 mm. I have examined this specimen and suspect that, based on the amount of white on the two

#### Plate 4 (page 89)

upper (*en haut*)

Black-shouldered Nightjar  
(*Engoulevent à épaulettes noires*)  
*Caprimulgus nigriscapularis*

lower (*en bas*)

Fiery-necked Nightjar  
(*Engoulevent musicien*)  
*C. pectoralis pectoralis*

middle (*au milieu*)

*C. pectoralis fervidus*

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outer-tail feathers, it may have been incorrectly assigned to *guttifer* rather than to *ruwenzorii*. Birds from the Marungu highlands to the south are also attributed to *guttifer* on the basis of one specimen. Although I have not examined this specimen, I suspect that on the basis of the extent of white on the outer-tail feathers, birds from this locality may also prove to be closer to *ruwenzorii* than to *guttifer*, although Louette<sup>5</sup> suggests that the southernmost Zaire populations may be intermediate between the two. Thus, the range of Rwenzori Nightjar may extend, in suitable habitat, south in the mountainous country on the western side of Lake Tanganyika, to Shaba Province, eastern Zaire.

*Caprimulgus (p)? guttifer* occurs in two populations, one in the Usambara Mountains of north-eastern Tanzania, the other in the highlands of south-western Tanzania, northern Malawi (Nyika Plateau, Viphaya Mountains, Muisi and Misuku) and north-eastern Zambia (Mafinga Mountains and the remainder of Nyika Plateau). The population in the Usambara mountains is worthy of further study, occurring as it does, so closely to a population of Mountain Nightjar at Arusha, northern Tanzania.

*Caprimulgus (p)? koesteri* is known only from Sandula and Mt Moco in Angola.

## Discussion

### *Mountain Nightjar*

Since it was first described from Ethiopia in 1840, the taxonomy and identification of this form has remained relatively straightforward, both sexes having white spots on the four outer primaries and the two outer-tail feathers largely white. The recently described population in Saudi Arabia may, after further study, be worthy of subspecific status<sup>4</sup>.

### *Rwenzori Nightjar*

Originally described from Uganda in 1908 as a full species. Sclater<sup>21</sup> seems to have been the first authority to regard this form as a race of Mountain Nightjar. Chapin<sup>7</sup> also treated it as a race of Mountain Nightjar although he did note that it was generally darker than that species and had less white on the two outer-tail feathers. Mackworth-Praed and Grant<sup>8,9,10</sup> treated it as a separate species, also noting that it was a dark species with more white on the two outer-tail feathers than *guttifer*. Both Snow<sup>11</sup> and Britton<sup>12</sup> considered it to be conspecific with Mountain Nightjar but Chappuis<sup>3</sup> elevated it back to full species status on the basis of the then, only? known recording, made by S. Keith in 1962. Harwin<sup>13</sup>, whilst briefly discussing the songs of some African nightjars, also noted that *ruwenzorii* was the darkest race. Fry<sup>2</sup> supported the view that it

should be treated as a full species and this was continued in Fry et al.<sup>6</sup>. Sibley and Monroe<sup>14</sup> listed it separately but with a footnote that it might be conspecific with Mountain Nightjar. Louette<sup>5</sup> questioned the inconsistency of excluding it from *poliocephalus* on the basis of vocalisation, whilst morphologically, it was intermediate between two taxa admitted to that species at the time. Short et al.<sup>15</sup> merged it with *poliocephalus* but a year later, Turner et al.<sup>16</sup> agreed with the treatment of *C. ruwenzorii* as a full species because of its differing call and tail pattern. Dowsett and Dowsett-Lemaire<sup>17</sup> believed that the vocal and morphological evidence clearly showed the two to be conspecific and urged caution in interpreting the differences between populations. They suggested that the song pattern of *ruwenzorii* is intermediate between *poliocephalus* to the north and *guttifer* to the south and that the variations are of dialectal, not specific, importance.

### *Caprimulgus (p)? guttifer*

This form was originally described from Tanzania in 1921, as a race of Fiery-necked Nightjar *Caprimulgus pectoralis*. Chapin<sup>7</sup> was the first to suggest that it would prove to be a race of *ruwenzorii*, although at the time this form was still regarded as a race of Mountain Nightjar. Mackworth-Praed and Grant<sup>9</sup> regarded it as a full species under the English name of Usambara Nightjar, comparing its small size and dark colour only with Fiery-necked Nightjar. Snow<sup>11</sup> and Britton<sup>12</sup> considered it to be conspecific with Mountain Nightjar and it was left under this species by Fry<sup>2</sup>, although he did point out that its taxonomic status awaited voice recording and analysis. Fry et al.<sup>6</sup> and Sibley and Monroe<sup>14</sup> also treated it as a race of Mountain Nightjar, and Louette<sup>5</sup> did not seem to explore the possibility that it might be a race of Rwenzori Nightjar. Turner et al.<sup>16</sup> suggested that in the case of Rwenzori Nightjar, the same reasoning with regards to the voice and the amount of white on the tail might be applied to *guttifer* in considering it to be a full species. However, they also recommended that field studies be undertaken to determine its true affinities. Dowsett and Dowsett-Lemaire<sup>17</sup> considered it to be conspecific with Mountain Nightjar, although they did note that its song was similar to that of *ruwenzorii*, more so than it was to *poliocephalus*.

### *Caprimulgus (p)? koesteri*

This, the last form, was described from Beguella (Angola) in 1931 as a full species. Chapin<sup>7</sup>, again, was the first to suggest that this form would prove to be a race of *ruwenzorii*. Mackworth-Praed and Grant<sup>9</sup> treated it as a race of Rwenzori Nightjar and noted that it was a dark species similar to the Usambara Nightjar *C. guttifer* but with more white on the two outer-tail feathers.



Mountain Nightjar *Caprimulgus poliocephalus*, Kenya (P Davey/VIREO)  
*Engoulevant d'Abyssinie* *Caprimulgus poliocephalus*, Kenya (P Davey/VIREO)



Rwenzori Nightjar *Caprimulgus ruwenzorii*, Nyika Plateau, Malawi (Nigel Cleere)  
*Engoulevant du Ruwenzori* *Caprimulgus ruwenzorii*, Plateau de Nyika, Malawi (Nigel Cleere)

Hall<sup>18</sup> described the second known specimen of this form, a male, and noted that it was a very close match to the type specimen of Rwenzori Nightjar, which differed only in having rather more white in the tail. Fry<sup>2</sup> noted that, as with *guttifer*, its taxonomic status awaited voice recording and analysis. He also stated that it was differentiated only by the amount of white in the tail, although it is not clear from which race he was referring to. Fry et al<sup>6</sup> continued to list it under *C. poliocephalus*, mentioning that it was similar to the nominate race except for the amount of white on the outer-tail feathers. This appears to have been an error.

## Summary

Much has been written about these four racial groups, with differing conclusions as to the specific or subspecific status of each. Both Fry<sup>2</sup> and Dowsett and Dowsett-Lemaire<sup>17</sup> have stated that the only significant morphological character separating the populations is the amount of white on the outer-tail feathers, which appears to be clinal. Neither seems to have considered the size of the white spotting on the four outer primaries or the overall coloration. The consistency of these features, coupled with the vocal differences, lends support to the conclusion that two species are involved.

Mountain Nightjar is the palest form, with largish white spots on the outer primaries and mainly white outer-tail feathers. It has an undulating, whistled song and its flight call is a series of deep *kak, kab, kab* notes. It has a north-easterly distribution within Africa, extending up as far as and into the Arabian peninsula. Rwenzori Nightjar is darker, with generally smaller white spots on the outer primaries and less white on the outer-tail feathers. Its slightly shorter whistled song is higher, more evenly pitched and its flight call is a rapid series of *ka, ka, ka, kab* notes, which are softer and less harsh than those of Mountain Nightjar. The form *guttiferis* as dark as Rwenzori Nightjar, with smallish white spots on the outer primaries and has similar vocalisations. It differs from Rwenzori Nightjar only in having slightly less white on the outer-tail feathers. The form *koesteri* is also dark with smallish white spots on the outer primaries. Despite its isolated range, it appears to have been named solely on one morphological characteristic, namely the extent of white on the outer-tail feathers. However, although only one male specimen is available for study, the measurements of the amount of white on its tail falls within the range measured on Rwenzori Nightjars, and in all other respects it is identical with that species.

I believe that Mountain Nightjar is probably best regarded as a monotypic species, and Rwenzori Nightjar as a polytypic species, with *guttifer* recognised as

a valid, southerly race *C. r. guttifer*. On the basis of the very small amount of evidence available, I suggest that the form *koesteri* is best treated as a synonym of Rwenzori Nightjar.

Jackson<sup>19</sup> has already discussed the English names of the Afrotropical nightjars and proposed that if *C. poliocephalus* and *C. ruwenzorii* are not conspecific, Abyssinian Nightjar would be a better name for Mountain Nightjar *C. poliocephalus* and Montane Nightjar a better name for Rwenzori Nightjar *C. ruwenzorii*. I support this recommended change in the English names of these two species.

## The Fiery-necked Nightjar group

Fiery-necked Nightjars are small to medium sized, brown or greyish-brown, variegated caprimulgids, occurring in wooded country below 1,500 m. Five racial groups are currently recognised, Fiery-necked Nightjar *Caprimulgus pectoralis*, *C. p. shelleyi*, *C. p. fervidus* and *C. p. crepusculans* and Black-shouldered Nightjar *C. nigriscapularis*. All five forms are of approximately the same size, being 23-25 cm in length, and have similar amounts of white on the two outer-tail feathers, but they do exhibit rather marked variation in overall plumage. They differ from the highland Mountain Nightjar group in being more heavily spotted (*C. p. pectoralis*), paler, generally greyer brown (*C. p. shelleyi*, *C. p. fervidus*, *C. P. crepusculans*), paler, more rufescent brown (*C. nigriscapularis*) and by usually having less white on the two outer-tail feathers.

## Identification

### *Fiery-necked Nightjar*

Upperparts brown or dark brown, streaked brown and speckled greyish-brown or greyish-white; wing coverts spotted brownish-white tinged buff. Narrow pale buff to rich tawny-buff collar around hindneck. The scapulars are buff on the outer webs, blackish-brown in the centres and pale brown speckled brown on the inner webs. Usually has a large white throat patch, the lower feathers of which have a buff subterminal band and blackish-brown tips. Some birds have only a white patch on either side of the lower throat. The breast is brown or dark brown, barred and speckled brownish-white. The belly and flanks are buff barred brown. The male has a large white spot, almost midway along the outer wing, on the four outer primaries and broad white tips (31-52 mm) to the two outer-tail feathers. The female is similar but has smaller white spots, edged or washed buffish, on the four outer primaries and less white (c25-38 mm), tinged buff and/or brown, on the two outer-tail feathers.



***C. p. shelleyi***

Similar to the nominate race, especially on the upperparts. The collar around the hindneck is broader, more reddish, and the ear-coverts, malar stripes, sides of throat and breast are paler and browner. Only the lower breast is barred brown, the belly and flanks are plainer buff. The amount of white on the outer primaries and tail feathers is similar to that on the nominate race.

***C. p. crepusculans***

Has paler upperparts than the nominate race and narrower streaking on the crown. The collar around the hindneck is rather broad and more reddish. The ear-coverts, malar stripes, sides of throat and breast are paler and browner. The underparts are paler buff with finer brown barring. The amount of white on the outer primaries and tail feathers is similar to that on the nominate race.

***C. p. fervidus***

Similar to *C. p. crepusculans* but paler. The black streaking on the crown is coarser, edged bright tawny, and the collar around the hindneck is broader, paler and more orange-tawny. The ear-coverts, malar stripes, sides of throat and upper breast are generally plain tawny/russet. The underparts have less brown barring. The amount of white on the outer primaries and

tail feathers is similar to that on the nominate race. Some individuals, especially of *crepusculans* and *fervidus*, often have brownish lesser coverts which contrast slightly with the rest of the wing coverts, but never as much as that shown by the next form.

***Black-shouldered Nightjar***

Upperparts brown or dark brown, finely speckled brown or rufescent-brown, becoming more rufous towards the tail. The mantle can be quite dark on some individuals. Tends to have less streaking on the crown than the four races of *C. pectoralis*, giving it a rather pale-headed appearance. The collar around the hindneck is rufous and rather broad. The wing coverts are generally dark brown on the outer webs with a buff spot on the tips, the inner webs are paler brown, speckled brownish-white. The lesser coverts are blackish-brown, finely speckled rufous, and always contrast markedly with the rest of the coverts, hence the English name Black-shouldered Nightjar. The scapulars are generally brownish, but blackish-brown on the distal half of the outer webs. The white throat patch is similar to that of *C. pectoralis* but the breast is rufescent-brown, finely barred brown and the belly and flanks are tawny-buff, narrowly barred brown. The male has a smallish white spot (generally smaller than on *C. pectoralis*), almost midway along the outer

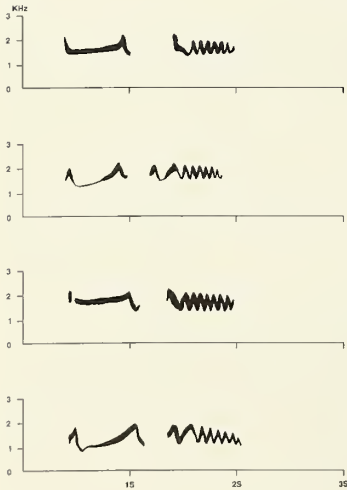


Figure 5  
Sonograms of songs of:  
(*Sonogrammes des chants de:*)  
A *C. nigriscapularis* Cameroon (Cameroun) (C Chappui)  
B *C. pectoralis* Bas Zaire, Zaire (Bas Zaire, Zaire) (C Carter)  
C *C. nigriscapularis* Northern Zaire (nord du Zaire) (R Stjernstedt)  
D *C. pectoralis* Angola (Angola) (M McChesney)

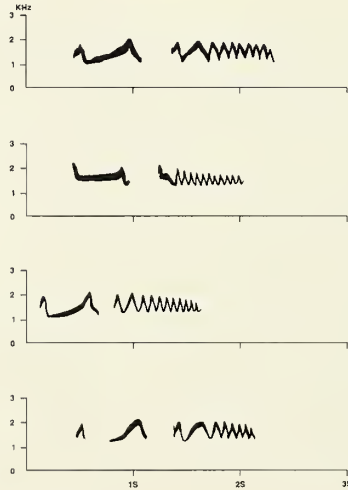


Figure 6  
Sonograms of songs of:  
(*Sonogrammes des chants de:*)  
E *C. pectoralis* Zambia (Zambie) (M Kelsey)  
F *C. nigriscapularis* Uganda (Ouganda) (M North)  
G *C. pectoralis* Southern Kenya (sud du Kenya) (D Fisher)  
H *C. pectoralis* South Africa (Afrique du sud) (J Stannard)

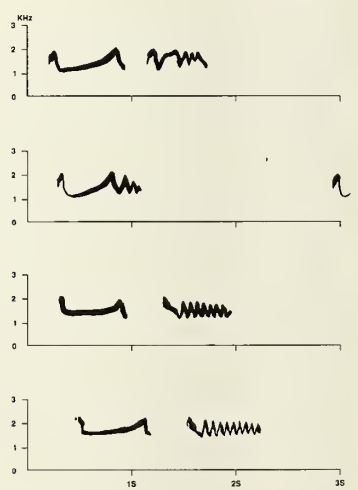


Figure 7  
Sonograms of songs of:  
(*Sonogrammes des chants de:*)  
I *C. pectoralis* South Africa (Afrique du sud) (K Adams)  
J *C. pectoralis* South Africa (Afrique du sud) (C & S Bearder)  
K *C. nigriscapularis* Uganda (Ouganda) (D Zimmerman)  
L *C. nigriscapularis* Haut Zaire, Zaire (Haut Zaire, Zaire) (P Kaestner)

wing, on the four outer primaries and broad white tips (36-45 mm) to the two outer-tail feathers. The female is similar but often has a paler head, a narrower collar around the hindneck, smaller white spots on the four outer primaries and less white (20-26 mm) on the two outer-tail feathers.

## Voice

### *Fiery-necked Nightjar*

The song is a melodious, double-noted whistle *peeu-oh, piri-riri*. A sonogram of a recording from South Africa, deposited in the NSAWS is reproduced in Figure 6 (H).

### *C. p. shelleyi*

The song is as above. Sonograms of recordings from western Zaire and Angola, deposited in the NSAWS are reproduced in Figure 5 (B and D). The sonogram of a recording from southern Kenya, Figure 6 (G), is possibly of this race. The sonogram of a recording from southern Zambia, Figure 6 (E), is either of this race or *C. p. fervidus*.

### *C. p. crepusculans*

The song is as above. Sonograms of recordings from South Africa, deposited in the NSAWS are reproduced in Figure 7 (I and J). *C. p. fervidus*. The song is as above. A sonogram of a recording from southern Zambia, Figure 6 (E), is either of this race or *C. p. shelleyi*.

Individual variation is, again, immediately evident but the general structure and frequency of the songs from each form remains the same. The first whistle is always undulated, the second is generally, an evenly pitched trill. Each note registers within a band of 0.8-2.2 khz. Figure 7 (J) appears to be an extreme variation but it is simply the first whistle merged with the beginning of the second note.

This species also utters a series of *wherp* notes, often preceding the song, which are slower and more drawn out than similar notes given by Black-shouldered Nightjar.

### *Black-shouldered Nightjar*

The song is an evenly pitched, double noted whistle *peeuo, piri-riri* or *peeuo, pererere*. Sonograms of recordings from Zaire and Uganda, deposited in the NSAWS and the Library of Natural Sounds, New York are reproduced in Figure 5 (D), Figure 6 (F) and Figure 7 (L). Sonograms of recordings from Cameroon and Uganda, taken from disc<sup>3</sup> are reproduced in Figure 5 (A) and Figure 7 (K). Individual variation is also evident within this species, although perhaps less so than within Fiery-necked Nightjar, but all songs show consistent differences from that species. The first whistle is evenly pitched, the second is trilled and also



Figure 8 Distribution of Black-shouldered (grey) and Fiery-necked Nightjars (solid)

Figure 8 Distribution de l'Engoulevent à épaulettes noires (gris) et de l'Engoulevent musicien (noir)

evenly pitched. Each note registers within a narrower band of 1.5-2.2 khz. This species also utters a series of *wherp* notes, often preceding the song, which are shorter and faster than similar notes given by Fiery-necked Nightjar.

## Distribution

Fiery-necked Nightjars of the nominate race have the smallest distribution within the species, occurring in southern South Africa (western, southern and eastern Cape Province, eastern Transkei and south-western Orange Free State). This population is partially migratory, wandering in April and May, after breeding, north and north-east as far as south-eastern Zimbabwe<sup>20</sup>. Return movements begin in early September.

*C. p. shelleyi* occurs in Angola, western (Bas Zaire) and southern Zaire, Zambia, northern Malawi and south-western Tanzania. This population may be partially migratory, possibly moving south after breeding to northern Namibia, northern Botswana and north-western Zimbabwe<sup>20</sup>. Birds occurring in central Tanzania and south-eastern Kenya possibly belong to this race.

*C. p. crepusculans* occurs in the easternmost parts of southern Africa, from South Africa (central and eastern Transkei, Natal, Zululand and eastern Transvaal) north through eastern Swaziland and south-eastern Zimbabwe to Mozambique and southern Malawi. The northern limits of this race are unclear but possibly include south-eastern Tanzania<sup>20</sup>. This population is mainly sedentary.

*C. p. fervidus* occurs in south-western and southern Angola, northern Namibia (including Caprivi Strip), northern and eastern Botswana, Zimbabwe and north-eastern South Africa (north-western and northern Transvaal). This is a migratory race although its movements are poorly understood<sup>20</sup>. It possibly moves north as far as northern Zambia, south-eastern Zaire and Tanzania. Specimens, possibly of this race, have also been recorded from Rwanda and Burundi.

Black-shouldered Nightjar occurs discontinuously throughout central Africa, and to a lesser extent in west Africa. It is found in Guinea Bissau, Guinea, western Sierra Leone, southern Nigeria, western Cameroon, Bioko Island, north-eastern and southwestern Zaire, south-eastern Congo, Rwanda, Burundi, western and southern Uganda, western Kenya and south-western and south-eastern Sudan. There are also 1-3 records from Senegal, Gambia, Togo and Central African Republic and possibly Côte d'Ivoire. This species is probably sedentary, and although details of any movements have yet to be documented, I have examined one specimen (undated) from Durban, South Africa which closely resembles this form. The ranges of the Fiery-necked and Black-shouldered Nightjars may well overlap in parts of central and southern Zaire.

## Discussion

### *Fiery-necked Nightjar*

The nominate form, first described from Cape Province, South Africa in 1817.

### *C. p. shelleyi*

Originally described from Angola in 1879 as a full species. Since then, birds showing the characteristics of this form appear to have been treated in the literature as either *C. p. fervidus* or another species entirely, Rufous-cheeked Nightjar *Caprimulgus rufigena*<sup>20</sup>. Clancey<sup>20</sup> recognised it as a valid form, but of subspecific not specific status.

### *C. p. crepusculans*

A new form, described as recently as 1994 by Clancey<sup>20</sup>.

### *C. p. fervidus*

Originally described from Namibia in 1875 as a full species. Although it differs from *C. pectoralis* in its general plumage coloration, its vocalisations and white wing and tail markings prove that it is now quite rightly treated as a race of that species.

### *Black-shouldered Nightjar*

Originally described from Zaire in 1893 as a full species, although since then it has generally been regarded as a race of Fiery-necked Nightjar. Chappuis<sup>3</sup> discussed its vocalisations but does not appear to have reached any conclusions. It was Fry<sup>2</sup> who elevated it

back to a full species on the basis of vocal differences, a treatment continued in Fry et al<sup>6</sup>, who also described plumage coloration differences. Louette<sup>5</sup> found it difficult to agree with this treatment when examining museum specimens from Zaire. Sibley and Monroe<sup>14</sup> continued with the separation of this form from *C. pectoralis* and this was followed by Turner et al<sup>16</sup>. Dowsett and Dowsett-Lemaire<sup>17</sup> mentioned the existence of natural geographical variation within the same form, stating that it was at least as great as that between *C. pectoralis* and *C. nigriscapularis*. In addition, they believed that the vocalisations of these two forms were so alike, they suggested the two were conspecific. Jackson<sup>19</sup> appeared to treat it as a race of *C. pectoralis* but Clancey<sup>20</sup> did not include it in his appraisal of the *C. pectoralis* group.

## Summary

Vocal and morphological differences between Fiery-necked Nightjar and Black-shouldered Nightjar appear to be consistent, and I support the views of Fry<sup>2</sup>, Fry et al<sup>6</sup> and Turner et al<sup>16</sup>, that two species are involved.

Fiery-Necked Nightjar is a polytypic species, with four currently recognised subspecies, *C. p. pectoralis*, *C. p. shelleyi*, *C. p. fervidus* and *C. p. crepusculans*. Although these races can be quite variable in colour, they all have similar white markings on the wings and tail. The song is a melodious, double-noted whistle, and although it can be quite variable, it always differs from the song of Black-shouldered Nightjar. The song is often preceded by a series of slow, drawn out *uherp* notes. All forms have a southerly distribution within Africa, and are partially migratory.

Black-shouldered Nightjar is a monotypic species which differs from the Fiery-necked Nightjar by its more rufescent upperparts and breast, its paler head and broader, more rufous collar around the hindneck, its darker lesser coverts or 'shoulders', which contrast more strongly with the rest of its wing-coverts, and its generally smaller white spots on the outer primaries. Its song is a more evenly pitched, double-noted whistle, which differs consistently from the song of Fiery-necked Nightjar. The song is often preceded by a series of *werp* notes, which are shorter and faster than similar notes given by Fiery-necked Nightjar. It has a more northerly distribution within Africa, and is possibly sedentary.

The ranges of the two species possibly overlap in parts of southern Zaire, from Bas Zaire in the southwest, to Kivu Province in the east.

Jackson<sup>19</sup> in his treatment of the English names of afro-tropical nightjars, proposed the name of Pectoral Nightjar for the *C. pectoralis/nigriscapularis* group. I

prefer to retain the use of Fiery-necked Nightjar for *C. pectoralis* and Black-shouldered Nightjar for *C. nigriscapularis*.

## Material examined

The following museum specimens were studied and measured: *Caprimulgus poliocephalus* 37; *Caprimulgus ruwenzorii* 45; *C. (p)? guttifer* 11; *C. (p)? koesteri* 1 (male); *Caprimulgus pectoralis* 39; *C. p. shelleyi* 16; *C. p. crepusculans* 17; *C. p. fervidus* 23 and *Caprimulgus nigriscapularis* 21.

Vocalisations were supplied by the NSAWS and the Library of Natural Sounds, New York from recordings deposited by K Adams; C & S Bearder; C Carter; F Dowsett-Lemaire; D Fisher; P Kaestner; M Kelsey; G. Low; M McChesney; R McVicker; M North; T Parker; J Stannard and R Stjernstedt. Additional recordings were available from C Chappuis<sup>3</sup>.

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